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Remarks

Claims 16 and 23 are amended and claim 29 is added.

Claims 16 to 29 are pending in this application of which claims 16 and 23 are in independent form.

Applicants' attorney thanks Examiner Fineman for the telephone interview held on November 17, 2006 and especially for reviewing the draft amendment.

Agreement was reached with respect to claim 16 in that the newly added limitation appears to overcome the prior art pending further search and consideration. With respect to claim 23, Examiner Fineman advised that the newly added limitation is still met by Ernstoff et al.

Claim 16 is amended herein as presented in the draft amendment except that the image sensor is now defined as generating an image signal from the image of the object rather than from both the image data inputted by the image projection module and the image of the object. This modification is needed because claim 16 is directed to the embodiment of FIG. 6 which incorporates a beam splitter 313. The beam splitter 313 sends the image data inputted by the image projection module directly to the viewer.

Claim 23 is amended herein to also include the image sensor. The clause in the draft amendment of claim 23 directed to the feature of the display unit including a reflection display is now made the subject matter of added dependent claim 29.

Claim 16 had been rejected under 35 USC 103(a) as being

unpatentable over Pensel et al in view of Müller et al. The following will show that the conclusion reached during the interview is indeed correct that claim 16 now patentably distinguishes the applicants' invention over this combination of references.

In Pensel et al, a surgical microscope is described with reference to FIG. 1 wherein a video recorder 19 and a video camera 26 are provided. However, Pensel et al does not disclose whether this "recording module" detects only the image of the viewing region in the surgical microscope or whether also image information is taken up thereby wherein the image of the viewing region is superposed with the image generated by a display.

With respect to Müller et al, the view is expressed in the action that reference numerals 19 and 26 disclose an image recording module. Applicants respectfully disagree and note that Müller et al is directed to a surgical microscope which makes possible the position determination of an object detail in the viewing field of the microscope. In FIG. 2 of Müller et al, it is true that the surgical microscope has a position resolving detector 23 with which the position of a laser beam, which is reflected on the object surface, can be detected (see column 5, line 49, to column 6, line 2). This is why position detector 23 can be a position detector or CCD-line array. Accordingly, the component 23 is not an image sensor.

This is specifically set forth in column 5, lines 61 to 63 of Müller et al where it is stated that:

"The position-resolving detector can be realized, for example, by a CCD-line array, a CCD-surface array or position-sensitive

detectors (PSD)."

At column 6, lines 25 to 27, Müller et al teaches that:

"This in-reflection or in-coupling of the desired and actual positions of the laser beam on the position detector 23 takes place via a projection lens 25, ..."  
(emphasis added)

From the above, it can be seen that the CCD device of Müller et al is not a device capable of generating image signals. To emphasize the feature of the applicants' image sensor with greater precision, claim 16 is amended herein to define the image sensor with the following clause:

"said image sensor generating an image signal from said image of said object for display on a monitor;"

It is this image signal which the recording device of the applicants' surgical microscope receives.

The applicants add that no image mixing takes place in the process control unit 3 in Müller et al (see column 4, line 64). Accordingly, Müller et al cannot render obvious for a person of ordinary skill to electronically mix an image, which is coupled out of the surgical microscope and supplied to an image sensor, and the image display of an image reflected into the surgical microscope. More specifically, there is no suggestion in the combination of Pensel et al and Müller et al which could enable our person of ordinary skill to arrive at the feature and limitation of claim 16 of:

"said recording device including an image mixer for receiving both said image data and said image of said object as electronic image data in the form of said image signal and for mixing said electronic image data therein."

For the reasons advanced above, applicants submit that the conclusion reached at the interview is correct and that claim 16 now patentably distinguishes their invention over the combination of Pensel et al and Müller et al and should be allowable. Claims 17 to 22 are all dependent directly or indirectly from claim 16 so that they too should now be allowable.

Claim 23 had been rejected under 35 USC 102(b) as being anticipated by Pensel et al. As noted above, claim 23 is amended to include the feature and limitation of the image sensor as generating an image signal from the image data and the image of the object for display on a monitor.

In the action, the suggestion is made that the device 24 of Pensel et al is provided for synchronizing the illumination of the image display unit with the image sensor and specific reference is made to column 5, lines 60 to 65. Applicants have studied this passage and all of Pensel et al and have not uncovered any reference to the synchronization of the illumination of the image projection module with the image sensor and applicants have amended claim 23 to recite that the synchronizing is to avoid flickering as set forth in the last clause of claim 23:

"a device for synchronizing the illumination of said image display unit with said image sensor to avoid flickering."

The word "synchronizing" is nowhere mentioned in Pensel et al. However, on page 8 of the action, the Examiner advises that she views this function within the broadest reasonable interpretation of synchronizing.

Applicants respectfully submit that the function of synchronizing should be viewed in the context of the applicants' disclosure and claim 23 wherein the image sensor is now defined with greater clarity and precision.

In view of the more careful definition of the image sensor and its association with the device for synchronization, applicants believe that claim 23 should now likewise patentably distinguish the applicants' invention over Pensel et al and be allowable.

Claims 24 to 29 are dependent from claim 23 so that these claims too should now be allowable.

Reconsideration of the application is earnestly solicited.

Respectfully submitted,



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